Formal Problem Statement

Jess Zhang

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Problem Statement

Bank of Portugal is the second largest commercial bank in Portugal. In order to improve its telemarketing effeciency, the campaign manager in Bank of Portugal wants to identify different groups within its client base and to develop better targeted telemarketing strategy.

Stakeholder

Bank of Portugal / Telemarketing department

Campaign manager: John Smith

Email: John.Smith@bancodeprotugal.com

Project team

Data Scientist: Jessica Zhang

Email: JessZh@gmail.com

Data Engineer: Nick Nolasco

Email: Nick.Nolasco@gmail.com

Project Goal

Many factors, such as age, job, and loan amount can affect people's banking decisions. Bank of Portugal believes it needs to develop a better targeted marketing strategy towards different profile groups. The goal of this project is to provide the campaign department with meaningful grouping of its clients from past campaigning data.

The model developed shall perform at least 20% better than the current effort success rate of 23.6% ~ 28.3%

Developing of the marketing strategy is outside of the scope of this project.

A few algorithms will be run and a model will be built to analyze the given dataset. The analysis will be shared and discussed with the campaign manager of Bank of Portugal. The campaign manager can continue to use the model to analyze data in the future.

The delivered model will work with additional data in the dataset. However, the model may not work if the client adds or removes columns from the dataset without conselingn this project team.

Estimated Risk

It is reasonable to believe that there are such groups exist in the given dataset. It is unlikely however possible that no meaningful profile groups can be identified from given data.

Delivery Timeline

The project team will be working on this project for the next 2 months. One data scientist and one data engineer will be working on the model and analysis full-time.

Milestone 1: 4/20/2018 The preliminary result will be delivered and discussed with the client on 4/30/2018.

Final Delivery: 5/31/2018 The estimated final delivery date is May 31st, 2018.
The final delivery date will be dicsussed with the client and adjusted as needed at the 4/30/2018 milestone date.

Data Source

Bank Marketing Data from http://archive.ics.uci.edu/ml/datasets/Bank+Marketing